

**City of San José**  
**CLASS SPECIFICATION**  
**HEAVY DIESEL EQUIPMENT OPERATOR-MECHANIC (3642)**

DEPARTMENT	ACCOUNTABLE TO	FLSA STATUS
Environmental Services	Heavy Diesel Equipment Supervisor	Non-exempt

**CLASS SUMMARY:**

Operates, maintains, repairs and overhauls large, clean burn, dual-fuel and tri-fuel engines, generators, compressors, and auxiliary equipment. Performs related work as required.

**DISTINGUISHING CHARACTERISTICS:**

This is the second level class in a three class Heavy Diesel Equipment Operator-Mechanic series, where incumbents perform work of moderate difficulty in the operation and maintenance of large power plants and auxiliary equipment, under the supervision of the next higher class, Senior Heavy Diesel Equipment Operator-Mechanic. Incumbents in this class differ from those in the next higher class of Senior Heavy Diesel Equipment Operator-Mechanic in that incumbents of the latter class usually handle most unusual or emergency conditions which may require the exercise of independent judgment within prescribed limits. Assignments will be made to any shift needed for in an around-the-clock operation. Incumbents must also be available for work on Saturdays, Sundays, and Holidays. Assignments for this classification are typically at the Water Pollution Control Plant.

Duties require a heavy level of physical exertion, including exerting up to 100 pounds of force occasionally, and/or up to 50 pounds of force frequently, and/or up to 20 pounds of force constantly to move objects.

**QUALIFICATIONS:**

(These qualifications are typically required. An equivalent combination of education, experience, knowledge, skills, and abilities sufficient to satisfactorily perform the duties of the job may be substituted.)

**Minimum Qualifications**

**Education and Experience :**

High school education or GED and two (2) years of experience as a mechanic in the operation, maintenance, repair, and overhaul of mechanical and electrical equipment related to large diesel and spark-ignited engines and/or power generators.

**Required Licensing (such as driver's license, certifications, etc.)**

A valid driver's license is required.

**Other Qualifications**

(Incumbents may be required to have different combinations of the listed qualifications, or more specific job-related qualifications depending on the position.)

**Basic Knowledge, Skills and Abilities**

(Needed at entry into the job in order to perform the essential duties.)

- Knowledge of diesel fuels and lubricants used in heavy-duty power plant operation.
- Knowledge of hazards and necessary safety procedures involved in working with large power plants and electric power generating units.

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- Knowledge of inspection, testing, dismantling, overhauling, repairing and completely reassembling large power plants, reciprocating engines, blowers, compressors, and related equipment.
- Knowledge of the principles, practices, and procedures of manual switching operations of diesel-electric generating equipment.
- Knowledge of the fundamentals of electricity, its generation and distribution.
- Ability to follow written and oral instructions.
- Ability to efficiently use mechanical hand and power tools and equipment common to large engine repair and maintenance.
- Ability to interpret charts and maintain operating logs and records.
- Ability to read and interpret meters, gauges, thermometers, and other recording and measuring devices.

**Desirable Qualifications**

**(Knowledge, skills, and abilities; licenses, certificates, education, experience that is more position specific and/or likely to contribute to more successful job performance.)**

- Knowledge of standard operating procedures related to operating and adjusting the distribution of electric power.
- Ability to start, operate, stop and adjust large clean burn, dual-fuel and tri-fuel diesel and spark ignited engines (typically 1000 h.p. or higher) and auxiliary equipment.
- Ability to provide lead direction and training.
- Ability to modify equipment for more efficient operation.
- Ability to operate power switchboard, and adjust distribution of electric power.
- Ability to repair a wide range of mechanical equipment.
- Ability to learn complex mechanical systems.

<b>DUTY NO.</b>	<b>TYPICAL CLASS ESSENTIAL DUTIES: (These duties and estimated frequency are a representative sample; position assignments may vary depending on the business needs of the department.) Duties may include, but are not limited to, the following:</b>	<b>FRE-QUENCY*</b>
1.	Starts, operates, stops, and adjusts large clean burn, dual-fuel and tri-fuel diesel engines and auxiliary equipment, as load demands dictate.	As Required
2.	Starts, operates, and stops low-pressure boilers.	Frequent
3.	Dismantles, overhauls, and reassembles engines, blowers, and compressors and auxiliary equipment	Continuous
4.	Makes inspections of assigned equipment and adjusts and repairs parts needing specific attention.	Continuous
5.	Makes adjustments to provide efficient engine and auxiliary equipment operation.	Continuous
6.	Reads meters, gauges, thermometers, and other recording and measuring devices which show operating procedures. Interprets graphic trends to monitor and adjust operating systems.	Continuous
7.	May modify equipment for more efficient operation or reduced maintenance.	As Required
8.	Operates power switchboard, and adjusts distribution of electric power, using standard operating procedures.	Continuous
9.	Cleans work area.	Occasional

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10.	Maintains records and prepares reports.	Continuous
11.	Provides for safety in work areas, and for safe operation of the equipment.	Continuous
12.	May provide training and direction to incumbents of the Assistant Heavy Diesel Equipment Operator-Mechanic classification.	Continuous
13.	Performs other duties of a similar nature or level.	As Required

\*Frequency defined as %, (totaling 100%) or "Continuous" (daily or approximately 20%+), "Frequent"(weekly or approximately 15%+), "Occasional"(monthly or approximately 10%+), "As Required"(Intermittent or 5% or less)

**CLASSIFICATION HISTORY:** Revised 1/98; 8/05; 3642s002